

HOUSING UNIT ESTIMATES FOR HAWAII,  
1980-1990

General findings

Hawaii's housing stock reached 402,644 units on April 1, 1990, according to estimates prepared annually by the Hawaii State Department of Business, Economic Development & Tourism. During the preceding year, the total increased 9,290 units, or 2.4 percent. For the entire decade, the increase was 20.5 percent (see figure 1).

Homeownership rates have always been low in the Islands, and they improved only fractionally during the 1980s, rising from 41.1 percent of the inventory at the beginning of the decade to 41.6 percent at the end. The number of owner occupied units increased 21.9 percent over the 10-year period, compared with 19.5 percent for renter occupied and vacant units (see figure 2).

A more dramatic shift was evident in the ownership of land under these owner occupied homes and apartments. Those on land owned in fee simple rose from 30.1 percent of the total housing supply in 1980 to 34.4 percent in 1990, a 37.9 percent growth in the number of such units. Owner occupied units on leased land, in contrast, actually declined 21.5 percent, from 11.1 percent of all accommodations in 1980 to 7.2 percent 10 years later. Owned units on leased land peaked in 1981, and since then have fallen by 22.4 percent. This shift in part reflects the conversion of lots under the provisions of the State Land Reform Act of 1967. During fiscal 1989, negotiated settlements made 2,167 lessees of residential lots eligible to convert their homes to fee simple, 284 lots were designated, and 330 lots were converted. 1/

Private renter occupied and vacant units continued to dominate the housing market, accounting for 51.2 percent of the total inventory in 1980 and 51.7 percent in 1990, a 10-year increase of 21.8 percent. Units owned by the federal government, in contrast, fell from 5.8 percent of the total at the start of the decade to 4.8 percent at its end, an actual decline of 10 units. Almost all of the federal housing was intended for members of the armed forces and their families. State- and county-owned units meanwhile increased by 17.5 percent, accounting for 1.9 percent of the total stock both in 1980 and 1990.

Most of the units in the State were on Oahu, both in 1980 and 1990, but increases were greater on the other islands. The City and County of Honolulu reported 75.4 percent of the State's housing stock in 1980 and 70.2 percent a decade later. The 10-year increase in the Oahu total was 12.1 percent, well below the Neighbor Islands' 46.0 percent. Maui led in county growth rates with 47.5 percent, and almost overtook the Big Island in total inventory. Hawaii County, the most populous aside from Honolulu, rose 46.2 percent, followed by Kauai County, the State's smallest, with 42.0 percent. (Kalawao, also termed a county, is a 13.3-square mile Hansen's Disease settlement on Molokai, which for statistical purposes is combined with Maui.)

Many private rental units are condominium apartments in rental pools intended for transient occupancy. Such accommodations made up 4.9 percent of the total housing stock in 1989, the most recent year

available, compared with 3.5 percent in 1980.

Partly because of this concentration on transient facilities, the resident inventory has lagged behind household formation (see figure 1). Between 1980 and 1989, the number of households increased by 22.8 percent but the total housing supply grew by only 17.7 percent and the number of resident units by only 16.0. Such divergent trends have sharply reduced vacancy rates throughout the State.

The foregoing estimates, reported in greater detail in the accompanying tables, will eventually be supplanted by 1990 census data, scheduled for release in April 1991. Soon thereafter, the 1981-1989 estimates shown in this report will be revised to take account of the census findings.

#### Definitions and methodology

The estimates reported here were based on the 1980 census of housing, annual building permit data from county building departments, and information supplied by government agencies providing housing, chiefly the armed forces and Hawaii Housing Authority.

The U.S. Bureau of the Census has defined a housing unit as a house, an apartment, a group of rooms, or a single room occupied as separate living quarters or, if vacant, intended for occupancy. Separate living quarters are those in which the occupants live and eat separately from other persons in the building and have direct access from the outside of the building or through a common hall. The occupants may be a single family, one person living alone, two or more families living together, or any other group of related or unrelated persons who share living arrangements. Both occupied and vacant housing units are included in the housing inventory except that tents, boats, vans, and the like are included only if they are occupied. Condominium units are included even if occupied by tourists or other nonresidents, but regular hotel units are generally counted only if occupied by persons who consider such units their usual place of residence.

Annual changes in the stock of private housing were estimated from building and demolition permit figures supplied by county building departments, as lagged to reflect the average interval between issuance of permit and completion of construction or razing, and transfers to or from government ownership. It was assumed that nine months elapsed, on the average, between the authorization and completion dates of a structure with three or more housing units. For one- or two-unit structures and all demolitions, a three-month lag was assumed. Although these lags may be unrealistically short for the large single-family subdivisions and high-rise apartment structures that made up a large part of the construction boom early in the 1970s, lengthening them would have a relatively modest effect on the annual totals for the housing inventory. The annual changes in government housing units were obtained from the agencies in charge of such units and reflected actual (rather than assumed) completion dates. These data on the reported components of change in the private and public inventory indicated a Statewide net intercensal (1970-1980) increase of 119,779 housing units, compared with an actual growth (as shown by the census) of 117,477. It should be noted that annual counts of the standing government inventory indicated a 12-month, 1989-1990 net increase of 364 units while data submitted on the components of change added to a net gain of 204 units.

Detailed statistics appear in the following tables. Table 1 presents annual estimates of the total housing inventory, 1980-1990, corresponding data from the Honolulu Department of Finance real property records on owner-occupied units, and data from government agencies on units under public jurisdiction. Annual intercensal and postcensal estimates of total units by counties appear in table 2. Table 3 contains figures from the Hawaii Visitors Bureau on condominium units in rental pools for transient use, and also on the remainder of the housing stock by counties. Estimates for recent years, by tenure and control by county, are given in table 4. Table 5 presents building permit statistics by counties, and table 6 contains data on the components of change in the inventory. Government units are listed in table 7. Table 8 compares housing trends, 1980-1989, with corresponding trends in population and households.

The present estimates were made as part of an annual review of changes in the housing supply in Hawaii, initiated early in 1954 and extended at that time back to 1940. 2/ In the past decade, these estimates have been prepared by the Hawaii State Department of Business, Economic Development & Tourism and its predecessor agencies, primarily from data provided by the armed forces, County building departments, Hawaii Housing Authority, and other Federal, State and County agencies. The assistance of these agencies is gratefully acknowledged.

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1/ Housing Finance and Development Corporation, FY 89 Annual Report, p. 19.

2/ For revised data for earlier years, see the Honolulu Redevelopment Agency, "Intercensal Estimates of Dwelling Units, 1940-1960," Redevelopment and Housing Research, No. 24, July 1964, pp. 23-31, and "Intercensal Estimates of Housing Units, 1960-1970," Redevelopment and Housing Research, No. 31, July 1971, pp. 13-17; DPED Statistical Report 156, Housing Unit Estimates for Hawaii, 1970-1982 (July 28, 1982); and Robert C. Schmitt, Historical Statistics of Hawaii (The University Press of Hawaii, 1977), tables 15.5 and 15.7.

Table 1  
TENURE AND CONTROL OF HOUSING:  
1980 TO 1990

[Condominium units occupied or intended for occupancy by nonresidents are included in these estimates]

Year	All housing units 1/	Owner-occupied units 2/		Renter-occupied and vacant units		
		Land owned	Land leased	Private 3/	Federal 4/	State and County 4/
1980	334,235	100,478	36,986	170,963	19,437	6,371
1981	342,873	104,677	37,413	174,753	19,427	6,603
1982	348,980	106,147	37,372	179,579	19,392	6,490
1983	353,414	108,761	35,586	183,249	19,304	6,514

1984	359,107	111,767	35,545	185,657	19,294	6,844
1985	364,436	114,548	35,681	187,905	19,280	7,022
1986	370,548	117,090	35,811	191,475	19,264	6,908
1987	377,898	121,019	35,959	194,582	19,265	7,073
1988	385,290	126,563	33,579	198,707	19,394	7,047
1989	393,354	132,691	30,996	202,959	19,421	7,287
1990	402,644	138,520	29,047	208,165	19,427	7,485

1/ As of April 1.

2/ As indicated by the number of taxpayers claiming home exemptions. The number of owner-occupied housing units reported by the U.S. Census of Housing is somewhat higher than the corresponding number based on taxpayer home exemptions, chiefly because of differences in definitions. Data as of January 1.

3/ Calculated as a residual after accounting for the known components, some of which pertain to dates other than April 1, and thus not attributable to any specific date.

4/ As of April 1. Data include housing units leased from private owners. Source: Present report.

Table 2  
HOUSING UNITS STANDING, BY COUNTIES:  
1980 TO 1990

[As of April 1. Condominium units occupied or intended for occupancy by nonresidents are included in these estimates]

Year	State total	City and County of Honolulu	Other counties			
			Total	Hawaii	Kauai	Maui
1980	334,235	252,038	82,197	34,215	14,828	33,154
1981	342,873	254,969	87,904	36,180	16,314	35,410
1982	348,980	256,967	92,013	37,738	17,081	37,194
1983	353,414	259,574	93,840	38,702	16,937	38,201
1984	359,107	262,902	96,205	39,762	17,539	38,904
1985	364,436	266,127	98,309	40,820	17,979	39,510
1986	370,548	269,390	101,158	41,944	18,446	40,768
1987	377,898	273,054	104,844	43,135	18,929	42,780
1988	385,290	276,509	108,781	44,700	19,476	44,605
1989	393,354	279,166	114,188	47,035	20,173	46,980
1990	402,644	282,653	119,991	50,019	21,054	48,918

Source: Present report.

Table 3  
RESIDENT AND NONRESIDENT HOUSING UNITS, BY  
COUNTIES: 1980 TO 1989

Category and year	State total	City & County of Honolulu	Total	Other counties		
				Hawaii	Kauai	Maui
RESIDENT 1/						
1980	322,598	247,152	75,446	33,594	13,395	28,457
1981	328,679	249,330	79,349	34,921	14,458	29,970
1982	334,580	251,280	83,300	36,254	15,402	31,644
1983	340,001	254,827	85,174	36,933	15,931	32,310
1984	341,505	256,015	85,490	37,860	15,941	31,689
1985	342,632	257,111	85,521	38,541	15,903	31,077
1986	347,549	259,552	87,997	39,892	15,872	32,233
1987	356,002	263,818	92,184	41,033	16,298	34,853
1988	364,170	268,874	95,296	42,346	16,621	36,329
1989 (revised)	374,214	273,247	100,967	45,017	17,139	38,811
NONRESIDENT 2/						
1980	11,637	4,886	6,751	621	1,433	4,697
1981	14,194	5,639	8,555	1,259	1,856	5,440
1982	14,400	5,687	8,713	1,484	1,679	5,550
1983	13,413	4,747	8,666	1,769	1,006	5,891
1984	17,602	6,887	10,715	1,902	1,598	7,215
1985	21,804	9,016	12,788	2,279	2,076	8,433
1986	22,999	9,838	13,161	2,052	2,574	8,535
1987	21,896	9,236	12,660	2,102	2,631	7,927
1988	21,120	7,635	13,485	2,354	2,855	8,276
1989 (revised)	19,140	5,919	13,221	2,018	3,034	8,169

1/ Includes all housing units other than condominium units in rental pools and intended for transient occupancy.

2/ Condominium units in rental pools and intended for transient occupancy, based on February survey data from the Hawaii Visitors Bureau.

Source: Nonresident units from Hawaii Visitors Bureau, Visitor Plant Inventory, February reports, 1980-1989; resident units calculated as residual, using April 1 estimates of total units in present report, table 2.

Table 4  
TENURE AND CONTROL OF HOUSING BY COUNTIES:  
1988 TO 1990

[Condominium units occupied or intended for occupancy by nonresidents are included in these estimates]

County	Owner-occupied units 2/		Land leased	Renter-occupied and vacant units 3/		State and County 1/
	All housing units 1/	Land owned		Private 4/	Federal 1/	
1988						
State total	385,290	126,563	33,579	198,707	19,394	7,047
City & County of Honolulu	276,509	87,096	31,180	133,664	19,264	5,305
County of Hawaii	44,700	19,187	1,244	23,255	50	964
County of Kauai	19,476	7,237	305	11,541	66	327
County of Maui	44,605	13,043	850	30,247	14	451
1989						
State total	393,354	132,691	30,996	202,959	19,421	7,287
City & County of Honolulu	279,166	91,632	28,512	134,431	19,299	5,292
County of Hawaii	47,035	19,998	1,281	24,506	45	1,205
County of Kauai	20,173	7,435	330	12,020	63	325
County of Maui	46,980	13,626	873	32,002	14	465
1990						
State total	402,644	138,520	29,047	208,165	19,427	7,485
City & Coounty of Honolulu	282,653	96,304	26,498	135,011	19,305	5,535
County of Hawaii	50,019	20,475	1,277	27,043	48	1,176
County of Kauai	21,054	7,705	357	12,602	65	325
County of Maui	48,918	14,036	915	33,50	99	449

1/ As of April 1.

2/ As indicated by the number of taxpayers claiming home exemptions, as of January 1.

3/ Data for both Federal and State agencies include housing units leased by these agencies from private owners. All data are as of April 1.

4/ Calculated as a residual after accounting for the known components, some of which pertain to dates other than April 1, and thus are not attributable to any specific date.

Source: Present study.

Table 5  
PRIVATE RESIDENTIAL CONSTRUCTION AND  
DEMOLITION AUTHORIZED BY PERMITS, BY  
COUNTIES: 1985 TO 1989

Category & year authorized	State total	City and County of Honolulu	Total	Other counties		
				Hawaii	Kauai	Maui
New 1-family dwellings						
1985	4,663	2,313	2,350	979	387	984
1986	4,985	2,024	2,961	1,127	417	1,417
1987	5,813	2,684	3,129	1,391	543	1,195
1988	6,067	2,001	4,066	1,715	692	1,659
1989	6,846	2,026	4,820	2,782	856	1,182
New duplex units:						
1985	208	112	96	64	-	32
1986	166	112	54	18	2	34
1987	182	124	58	50	6	2
1988	205	172	33	28	5	-
1989	219	124	95	63	12	20
New apartments:						
1985	2,388	1,744	644	129	84	431
1986	2,570	2,076	494	22	-	472
1987	1,671	785	886	314	-	572
1988	2,802	1,377	1,425	446	21	958
1989	2,618	1,852	766	59	5	702
Units demolished: 1/						
1985	555	455	100	38	12	50
1986	690	534	156	43	60	53
1987	825	741	84	40	2	42
1988	753	629	124	57	9	58
1989	864	690	174	96	4	74

1/ Excludes housing destroyed in Hawaii County by volcanic activity or high winds: 25 units in 1986, 18 in 1987, 6 in 1988, and 12 in 1989.

Source: Compiled from County building departments by the Hawaii State Department of Business, Economic Development & Tourism.

Table 6  
COMPONENTS OF CHANGE IN THE HOUSING  
INVENTORY, BY CONTROL AND COUNTY:  
APRIL 1, 1989 TO MARCH 31, 1990

New housing units built

County and control	In 1-unit struc- tures	In 2-unit struc- tures	In multi- unit struc- tures	Housing units con- verted 1/	Housing units demol- ished	Housing units trans- ferred 2/
State total	7,199	219	2,919	+23	910	-
City and County of Honolulu	2,273	124	1,820	(NA)	723	-
Private 3/	2,026	124	1,614	(NA)	690	+164
Armed forces	-	-	-	-	-	+37
HFDC	-	-	206	-	-	-
DLNR	-	-	-	-	7	-
Transportation	-	-	-	-	-	+2
Hon. DHCD	247	-	-	-	26	-203
Hawaii County	2,782	63	252	+21	108	-
Private 3/	2,782	63	252	+21	108	-
Kauai County	856	12	13	+2	4	-
Private 3/	856	12	13	+2	4	-
Maui County	1,288	20	834	(NA)	75	-
Private 3/	1,182	20	830	(NA)	74	+1
Health	-	-	4	-	1	-
Maui Housing Division	106	-	-	-	-	-1

NA Not available.

1/ Number added less number deleted.

2/ Net gain (+) or loss (-) by purchase, sale, donation, or lease.

3/ Based on building permit data, allowing nine months for completion of units in multi-unit structures and three months for all other activity.

Source: Present study.



Table 7  
HOUSING UNITS OWNED OR OPERATED BY  
GOVERNMENT AGENCIES, BY COUNTIES:  
APRIL 1, 1990

Government unit or type of housing	State total	City and County of Honolulu	Hawaii County	Kalawao County	Kauai County	Maui County
All agencies	26,912	24,840	1,224	114	390	344
Federal government	19,427	19,305	48	-	65	9
Armed forces	19,378	19,295	15	-	62	6
Oahu Consol. Family Hsg. Office	19,007	19,004	3	-	-	-
Coast Guard	315	291	12	-	6	6
Navy	56	-	-	-	56	-
Civilian agencies	49	10	33	-	3	3
East-West Center	3	3	-	-	-	-
Fish & Wildlife Service	5	2	-	-	3	-
National Park Service	36	-	33	-	-	3
National Weather Service	5	5	-	-	-	-
State government	6,814	5,043	1,126	114	324	207
Education	26	26	-	-	-	-
Hawaii Housing Authority:						
Rental 1/ Teachers housing	6,360	4,864	1,058	-	296	142
Health	67	-	37	-	-	30
Land & Natural Resources	175	20	16	114	5	20
Transportation	90	48	9	-	22	11
University of Hawaii	7	4	-	-	-	3
County government	89	81	6	-	1	1
	671	492	50	-	1	128

1/ Includes units owned by the Housing  
Finance and Development Corporation but managed by HHA.

Source: Hawaii State Department of Business, Economic Development &  
Tourism, survey of government agencies.

Table 8  
HOUSING UNITS, HOUSEHOLDS, AND  
RESIDENT POPULATION: 1980 TO 1989

Subject	Housing units			Resident population
	Total	Resident	Households	
1980	334,235	322,598	294,052	964,691
1989	393,354	374,214	361,000	1,112,100
Percent change	17.7	16.0	22.8	15.3

Source: Housing units from present report, tables 1 and 3. Households and resident population from U.S. Bureau of the Census.